

# Comparisons of Job Characteristics

**Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)**

**Associated Occupation: Engineers, All Other (17-2199)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 83

**Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)**

**Associated Occupation: Engineers, All Other (17-2199)**

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Engineering and Technology	5.7	20.1	23.6	>> Current knowledge level is likely more than sufficient
Mathematics	9.2	17.1	11.2	<< Extensive education and/or training may be required
Design	5.2	16.5	12.2	<< Extensive education and/or training may be required
Computers and Electronics	8.4	15.0	17.3	> Current knowledge level is likely sufficient
Physics	4.3	14.8	9.7	<< Extensive education and/or training may be required
Mechanical	6.8	14.0	17.3	>> Current knowledge level is likely more than sufficient
Production and Processing	6.0	12.9	13.2	0 Current knowledge level may be sufficient
Building and Construction	4.0	6.6	2.0	<< Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 66

**Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)**

**Associated Occupation: Engineers, All Other (17-2199)**

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mathematics	6.2	12.8	6.7	<< Extensive development of skills in this area may be required
Systems Analysis	6.5	11.7	7.3	<< Extensive development of skills in this area may be required
Science	4.5	11.4	9.7	< A higher skill level may be required

Systems Evaluation	6.4	11.1	7.2	<<	Extensive development of skills in this area may be required
Operations Analysis	5.0	10.8	6.8	<<	Extensive development of skills in this area may be required
Technology Design	2.6	7.9	3.5	<<	Extensive development of skills in this area may be required
Equipment Selection	3.3	6.3	6.1	0	Current skill level may be sufficient
Programming	2.2	5.3	2.9	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 95

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation: Engineers, All Other (17-2199)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	15.1	13.3	<	Some improvement in abilities may be required
Deductive Reasoning	10.6	15.0	12.5	<	Some improvement in abilities may be required
Inductive Reasoning	10.2	13.7	12.2	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	13.4	8.1	<<	Extensive improvement in abilities may be required
Information Ordering	9.9	13.2	11.6	<	Some improvement in abilities may be required
Category Flexibility	9.0	12.3	10.5	<	Some improvement in abilities may be required
Originality	7.6	11.8	7.7	<<	Extensive improvement in abilities may be required
Visualization	7.5	11.7	10.1	<	Some improvement in abilities may be required
Number Facility	6.3	11.6	7.4	<<	Extensive improvement in abilities may be required
Fluency of Ideas	7.6	11.4	8.3	<<	Extensive improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

There are no common work activities.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 67

Focus Occupation: Aerospace Engineering and Operations Technicians (17-3021)

Associated Occupation: Engineers, All Other (17-2199)

<b>Tools and Technologies</b>	<b>Exclusivity</b>
Business function specific software	1
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Indicating and recording instruments	2
Industry specific software	1
Laboratory ovens and accessories	15
Length and thickness and distance measuring instruments	2
Light and wave generating and measuring equipment	4
Liquid and gas flow measuring and observing instruments	15
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Metals and metallurgy and structural materials testing instruments	15
Non destructive examination equipment	13
Power tools	2
Soldering and brazing and welding machinery and supplies	6
Spectroscopic equipment	10
Temperature and heat measuring instruments	6
Viewing and observing instruments and accessories	4

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.